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## Beetles World

Is an occasional published journal devoted to taxonomy and to biodiversity of *Coleoptera*. We offer cooperation on the new description for every taxonomist from all parts of the world. Any descriptions and taxonomical act should be in accordance with the criteria defined by ICZN. Articles must be in English or in another mainly spoken language in science with English abstract.

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A new species of the genus *Neolucanus* THOMSON, 1862 (*Coleoptera, Lucanidae*) from Central Vietnam.

Nguyen Quangthai and Klaus-Dirk Schenk

#### Abstract

The new species *Neolucanus punctulatus* of the genus *Neolucanus* THOMSON, 1862 from Central Vietnam is described, pictured and compared with the related species *Neolucanus guiardi* DIDIER, 1926.

#### Key words

Coleoptera, Lucanidae, Neolucanus punctulatus, Neolucanus guiardi, Vietnam.



Fig. 1: *Neolucanus punctulatus* spec. nov. ♂ (Holotype) dorsal (1) and ventral (2), central Vietnam, Da Nang province, Ba Na mountain, (Scale bar = 1 cm).



Fig. 2: *Neolucanus punctulatus* spec. nov. ♂ (Holotype) dorso-lateral view of prothorax and head.



Fig. 3: *Neolucanus punctulatus* spec. nov. male genitalia (Holotype), dorsal (5), lateral (6) and ventral (7)

**Holotype.** *C*, central Vietnam, Da Nang province, Ba Na mountain, 7.V.2013, local collector leg., deposited in the Vietnam National Museum of Nature (VNMN), Hanoi, Vietnam.

**Paratypes.** 1 ♂, 1 ♀ same collecting data, in coll. Nguyen Quangthai, Hanoi, Vietnam. 10 ♂, same collecting data, in coll. Xuan Xung, Hanoi, Vietnam.

**Etymology.** The name is adapted from the Latin word "punctulatus" (= punctured) because of the strongly punctured body surface of this species.

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**Description.**  $\bigcirc$  (Holotype), total length 27,0 mm, mandibles long 4,2 mm, head width 7,0 mm, prothorax width 11,0 mm, elytra long 14,0 mm, elytra width 11,0 mm (fig. 1) Total length of the male paratypes 26,5 – 36,0 mm. Dorsal surface of head, mandibles, prothorax and downside including the epipleura black; elytra yellow with a black v-shaped black patch dilated at base and gradually but somewhat irregularly narrowing towards the apex. Outer margins of the elytra with a wide black band.

The head is about 1.5 times as wide as long; densely punctured on dorsal and ventral side; the front margin is deeply concave. The canthi are occupying nearly the total outer margin of the eyes. The preocular margins are nearly straight. The anterolateral angels of the head are obtuse. The mentum is semicircular and covered with hairs; the submentum is concave. The mandibles are about 1.5 as long as the head. They are strongly curved upward, rather stout from the base to the anterior 1/3 and gently thinned towards the apex. The inner margins are nearly strait with a triangular basal tooth. There are 7 - 8 smaller and shorter teeth between the basal tooth and the apex. The apex of the mandibles is pointed; not forming an apical fork and having no uprising tooth (fig. 2).

The antennal clubs are formed by 3 pubescent antennomeres; antennomere 7 is sharply pointed at the tip. Antennomeres 8 - 10 are lamellate.

The Pronotum is as long as but markedly wider than the head; widest at the posterior 1/3 and densely punctured on the surface. The lateral margins are smooth and are concave behind the obtuse lateral angles. The hind angles are protruding and forming an edge at the outside margins.

The elytra are oval shaped, markedly wider than the head and about as wide as the pronotum; the widest point is at 1/3 from the base. The surface is opaque and covered with small punctures; there is no striation.

The protibiae are smooth along the lateral margins, have 1 - 2 distinct triangular teeth and are forming a large fork at the tip. The lateral margins of mesotibiae and metatibiae are without teeth and smooth at the lateral margins. The male genitalia are pictured in fig. 3.



Fig. 4: *Neolucanus punctulatus* spec. nov. ♀ (Allotype), dorsal (3) and ventral (4) (scale bar = 1 cm)

 $\bigcirc$  (Allotype), total length 22,5 mm, mandibles long 2,0 mm, head width 6,2 mm, prothorax width 10,5 mm, elytra long 13,0 mm, elytra width11,0 mm (fig. 4).

The dorsal and ventral sides of the entire body are black except for the yellowish brown pallial marks on the elytra. The head is punctured on both sides. The Canthi are occupying nearly the total outer margin of the eyes. The preocular margins are broad. The mentum is rectangular, rounded at the anterolateral angles and densely punctured. The submentum is sparsely punctuated. Mentum and submentum are covered by yellow hairs.

The mandibles are as long as the head, evenly incurved, punctured on the dorsal and ventral surfaces and have two median inner teeth.

The antennal clubs are formed same as of the males.

The Pronotum is convex, about 1.5 times as wide as long, and widest at the posterior 1/3. It is densely punctured. The lateral angles are round, the hind angels angular. The lateral margins are smooth with high edges.

The elytra are almost as wide as the prothorax, sparsely punctured, weakly shining, and have a broad black band on each outer margin. The epipleurae are black.

The anterior tibiae are punctuated dorsally and have along the lateral margins 1 - 2 distinct teeth at the apical half. The apex is shallowly bifurcate with the branches narrowly separated and blunt at the tip. The mesotibiae and metatibiae are strait, with yellow hairs but without spines along the lateral margins.

**Diagnosis.** The species closest to *Neolucanus punctulatus* spec. nov. in morphological distance is *Neolucanus guiardi* DIDIER, 1926 from Laos. *N. punctulatus* spec. nov. can be separated from *N. guiardi* by the following external characters:

- Body somewhat more slender (for  $\stackrel{?}{\circ}$  and  $\stackrel{\bigcirc}{\circ}$ ).
- Elytra bicoloured (for  $3^\circ$  and  $9^\circ$ ) (*N. guiardi* is entirely black).
- Protibiae with 1 2 distinct triangular teeth (for  $3^\circ$  and  $9^\circ$ ) (*N. guiardi* with 3 4 teeth).
- Male mandibles longer and strongly curved upward. Mandibles thinned towards the apex and more sinuous externally (similar as *Neolucanus rondoni* LACROIX, 1972).
- Male mandibles with 7 8 smaller short teeth between the inner basal tooth and the apex (*N. guiardi* with 6 short teeth).

There are no pictures of the male genitalia of *N. guiardi* for comparison.

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New record of *Neolucanus rudolphi* SCHENK, 2008 for China (Tibet) (*Coleoptera, Lucanidae*).

Klaus-Dirk Schenk

### Abstract

*Neolucanus rudolphi* SCHENK, 2008 is raised to the species level. The species was originally described from north-eastern India (Arunachal Pradesh) and is recorded first time for China (south-eastern Tibet). A male specimen from Tibet is pictured.

#### Key words

Coleoptera, Lucanidae, Neolucanus rudolphi, India, China.



Fig. 1: *Neolucanus rudolphi*, dorsal (left) and ventral (right) ♂, China, south-eastern Tibet, Motuo county

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*Neolucanus rudolphi* SCHENK, 2008 was originally described as a subspecies of *N. lanwanorum* NAGAI, 2000 from. Careful comparison of several specimen of *N. rudolphi* from northern India (Arunachal Pradesh) and from China (south-eastern Tibet) with *N. lanwanorum* convinced the author to raise *N. rudolphi* to the species level.

*N. rudolphi* can be separated from *N. lanwanorum* by the following external morphological characters:

- Body bigger, less compact, more slender (for  $\stackrel{\scriptstyle ?}{\scriptstyle \circ}$  and  $\stackrel{\scriptstyle \bigcirc}{\scriptstyle \circ}$ ).
- Mandibles at outside near the basis somewhat concave (*N. lanwanorum* strait near the basis) (for ♂).
- Head wider and shorter (for  $\stackrel{\wedge}{\rightarrow}$  and  $\stackrel{\bigcirc}{\rightarrow}$ ).
- Anterolateral angles of the canthi wider than the posterior angles (*N. lanwanorum* anterolateral angles of the canthi less wide than the posterior angles).
- Prothorax wider, median angles acute, hind angles round (*N. lanwanorum* median angles round, hind angles acute) (for ♂ and ♀).
- Anterior tibiae at outer margin 2 3 teeth, teeth placed more interiorly (*N. lanwanorum* 4 5 teeth) (for ♂ and ♀).
- Surface of prothorax smoother and more shining (for  $\stackrel{\circ}{\circ}$  and  $\stackrel{\circ}{\circ}$ ).
- Elytra light reddish brown (*N. lanwanorum* dark reddish brown) (for ♂).

Several specimen of *N. rudolphi* have been collected in July 2011 and 2012 by a Chinese collector in south-eastern Tibet, Motuo county, 80 km south of Motuo, 1230m. A male specimen coming from this new location is pictured in fig. 1. Comparison of the specimen from Tibet with the holotype of *N. lanwanorum rudolphi* did show no morphological differences and have been determined to be *N. rudolphi*.

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